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U.S. law may boost telecom development in Third World

GREGORY C. STAPLE

LAST December, the Congress of the United States passed a foreign aid bill. The bill attracted little notice. But it eventually could lead the World Bank and its sister organizations to make tens of millions of dollars in new loans for telecommunications facilities in the Third World.

The new law requires the U.S. executive directors of the World Bank and of three other multilateral banks "vigorously" to promote a shift in the banks' lending priorities. In place of large scale, capital intensive projects, which often have had disasterous environmental effects, the law mandates U.S. support for small scale, environmentally beneficial and culturally appropriate projects, including "rural and mobile telecommunications systems."

To date, the kind of village-based communications systems encouraged by the law have won only a fraction of the banks' annual loan budgets. The U.S. legislation consequently provides an important tool for those development experts throughout the world who have long argued that telecommunication investments are one of the most cost effective catalysts for stimulating balanced economic growth.

Loans for telecommunications facilities also are less likely to add to the debt crisis facing developing countries because the costs of telecommunications facilities generally can be recouped directly through the use of appropriate nationwide tariff structures. Much industrial and agricultural development debt, by contrast, cannot be directly tied to proven revenue sources.

The U.S. reform proposal is the result of an unprecedented 3-year campaign by a coalition of environmental organizations. Led by Bruce Rich, a senior staff attorney at the Environmental Defense Fund (EDF) in Washington, the coalition began to focus on the development banks' lending record in the early 1980s as evidence mounted regarding the massive environmental damage caused by bank-financed projects. Because the U.S. is the single largest stockholder in the development banks, the environmentalists reasoned that if their American representatives were required to push for an ecologically sensitive loan agenda, the banks were likely to take heed.

"No other international or bilateral institutions have more impact on development projects in the Third World than the multilateral banks," said Rich.

In recent years the four organizations targeted by the new legislation—the World Bank, the Inter-American, Asian and African Development Banks—have lent more than $20 billion annually. In fiscal 1985, the World Bank alone made $15.3 billion in new loan commitments for 236 projects in more than 80 countries.

To the distress of EDF and its allies in Congress, notably Sen. Robert Kasten (R., Wis.) and Rep. David Obey (D., Wis.), the banks have concentrated their loans in sectors which are likely to cause serious environmental and public health problems. Energy, transportation and cash crop agricultural projects are particularly problematic, according to Rich. For example, a 1500 kilometer access highway and jungle colonization project in northwest Brazil, known as Polonoroeste, was halted by the World Bank last year after deforestation, disease, crop failures and the dislocation of local Indians became too great to ignore.

For U.S. policymakers, the lesson is now clear: Economic development must be linked to sustainable management of natural resources and respect for indigenous peoples. The new law thus requires the U.S. to press the banks "to increase the proportion of their lending programs supporting environmentally beneficial projects and appropriate or light capital technology projects." As examples of desirable projects, the law expressly includes "energy efficient technologies such as. . .rural and mobile telecommunications systems."

The suggestion that telecommunications may form an integral part of a new, environmentally responsible loan agenda raises exciting hopes as well as challenges.

During the last decade, a growing number of communications planners, including respected World Bank economists like Robert Saunders and Bjorn Wellenius have campaigned to make telecommunications a more equal partner in Third World development. There are now a wealth of studies (many surveyed in Saunders, Wellenius and Jeremy Warford's 1983 text "Telecommunications and Development") showing that the economic returns from telecommunications investments, even in rural areas, equal or exceed the return from traditionally favored development projects, such as power generation and road building. Yet telecommunications has been historically treated as a poor relation by the development banks (Table 1).

Furthermore, contemporary technology has also enhanced the promise of rural and mobile telecommunications facilities. Small earth stations, solid state telephone exchanges of 100 or fewer lines, low-cost radio links from earth stations to surrounding communities and alternative solar power sources for areas lacking reliable electrical grids are now available. Drawing on these technologies, the 1983 GLODOM study by the International Telecommunication Union (ITU) in Geneva, estimated that for only $1.3 billion—half the amount the World Bank loans annually for power projects—four high powered satellites could be interconnected to roughly 50,000 small earth stations to supply low-cost telephone service throughout the developing world.

Last year the ITU's Maitland Com-

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Table 1 Sectoral Distribution of World Bank Group Loans, 1983 to 1985 (in million U.S. $s)

	1983	1984	1985
Agricultural and rural development	$ 3,689	3,473	3,749
Electric power	1,768	2,649	2,250
Transportation	1,924	2,597	2,139
Water supply and waste disposal	811	641	781
Industry	692	591	644
Education	548	694	928
Telecommunications	57	166	122

Source: World Bank Annual Reports

Continued from page 42

mission took up the call. The commission's report noted a pattern of continuing underinvestment in telecommunications throughout the Third World. In many countries, telephone densities are still on the order of 1 or 2 per 1000 people, as compared to 800 or more in industrialized nations. The commission concluded: "no development program of any country should be regarded as balanced, properly integrated or ... effective, without a full and appropriate role for telecommunications."

The telecommunications development needs of Third World countries and the goals of U.S. lending policy have converged.

The hope is that changing U.S. policy toward the development banks will give telecommunications lending new prominence. The challenge will be to make the economic and environmental merits of such loans more widely known.

From an energy conservation standpoint, there is already considerable evidence that the availability of telephone service and mobile radio facilities can sharply reduce transport and fuel costs that have led many countries to borrow heavily in the past.

In developing countries, where truck and bus fleets typically form the backbone of the transportation system, efficient fleet management thus can have large benefits. Similarly, although transport corridors are often viewed as central to the development of remote areas, where the ecological and human costs of such projects are very high, less-intensive construction with greater reliance on telecommunications facilities may be preferable.

Recent World Bank projects in Nepal could point the way. According to the fiscal 1985 report, more than $20 million is being loaned as part of a $65 million program to expand telephone facilities in Katmandu, Nepal's capital, and to provide telephone services to about 90 rural communities for the first time.

At the same time, however, the bank has committed more than $47 million to Nepal for a new all-weather, east-west highway to "integrate" the far western portion of the country. Although the absence of such a highway undoubtedly has affected commerce, a principal effect of past road-building schemes has been accelerating the deforestation and urban migration from which Nepal, like other developing countries, now suffers.

In the longer run, by addressing these issues, telecommunications may be able to make the most significant contribution to the alternative development paradigm propounded by the environmentalists. Of course, modern telephone or telex facilities in and of themselves will not keep people on the land or enable them to increase it wisely. But they will help.

By carefully balancing telecommunications investment to support marketing arrangements, social services delivery systems and other development projects that sustain a country's resources base, communication may make an important contribution. In addition, by expanding access to local telecommunications facilities, more local people can be brought into the planning process.

Implementing this new agenda will not be easy. The bureaucratic inertia of the multilateral banks is considerable. As the environmentalists have learned, even the smallest reforms require sustained lobbying, both within the United States and other major donor nations.

Further research also will be necessary to explore the best way to use rural and mobile telecommunications technologies to support the goals of the new legislation. Technology is not a panacea. Small diameter earth stations, for instance, can be used as easily to support remote mineral exploration as to link rural areas of a country together. The satellite-based communication systems serving northern Canada and Alaska illustrate the point.

At root, the new U.S. law's success in stimulating more telecommunications loans will depend on the response of its intended beneficiaries.

As Douglas Goldschmidt, a New York-based communication expert who has consulted for the U.S. Agency for International Development and the satellite industry, stresses: "It is up to the government of the borrowing country to initiate a request for World Bank group lending in a particular sector, such as telecommunications, and to determine the priority of that request in terms of overall national borrowing [for development projects]. Without the initial government priority, telecommunications will not become part of the loan program."

It is too early to judge the impact of the U.S. initiative on World Bank lending practices. At recent congressional hearings in Washington, however, Reagan administration officials made it clear that they will actively seek to implement the new agenda established by the 1985 law. The administration's nomination of former U.S. Rep. Barber Conable (R-N.Y.), an independent-minded politician knowledgeable about economic affairs, to assume the presidency of the World Bank, also suggests that reform is in the air.

It is now up to the international communications community in the industrialized countries and the developing world to take advantage of these promising developments.